

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/423,035A

DATE: 05/15/2001
TIME: 09:39:15

Input Set : A:\Scr21901.app
Output Set: N:\CRF3\05152001\I423035A.raw

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ENTERED

3 <110> APPLICANT: Joyce, Gerald F.
4 Breaker, Ronald R.
6 <120> TITLE OF INVENTION: ENZYMATIC DNA MOLECULES
8 <130> FILE REFERENCE: SCR2190S
10 <140> CURRENT APPLICATION NUMBER: 09/423,035A
11 <141> CURRENT FILING DATE: 2000-01-13
13 <150> PRIOR APPLICATION NUMBER: PCT/US98/08677
14 <151> PRIOR FILING DATE: 1998-04-29
16 <150> PRIOR APPLICATION NUMBER: 60/045,228
17 <151> PRIOR FILING DATE: 1997-04-29
19 <160> NUMBER OF SEQ ID NOS: 131
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 15
25 <212> TYPE: DNA
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence: 3' terminal
30 sequence
32 <400> SEQUENCE: 1
33 cggttaagctt ggcac 15
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 20
38 <212> TYPE: DNA
39 <213> ORGANISM: Artificial Sequence
41 <220> FEATURE:
42 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule: The N
43 at position 8 is adenosine ribonucleotide.
45 <220> FEATURE:
46 <223> OTHER INFORMATION: Description of Artificial Sequence: substrate
48 <400> SEQUENCE: 2
49 tcactatnag gaagagatgg 20
52 <210> SEQ ID NO: 3
53 <211> LENGTH: 38
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
60 <400> SEQUENCE: 3
61 acacatctct gaagtagcgc cgccgtatag tgacgcta 38
64 <210> SEQ ID NO: 4
65 <211> LENGTH: 80
66 <212> TYPE: DNA
67 <213> ORGANISM: Artificial Sequence
69 <220> FEATURE:
70 <223> OTHER INFORMATION: Description of Artificial Sequence: oligomer
72 <220> FEATURE:

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73 <221> NAME/KEY: misc_feature
74 <222> LOCATION: (16)..(65)
75 <223> OTHER INFORMATION: n is an equimolar mixture of G, A, T and C
77 <400> SEQUENCE: 4
W--> 78 gtgccaagct taccgnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
W--> 79 nnnnnngtcgc catctcttcc 80
82 <210> SEQ ID NO: 5
83 <211> LENGTH: 28
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule: The n
89 at position 28 is adenosine ribonucleotide.
91 <220> FEATURE:
92 <221> NAME/KEY: misc_feature
93 <222> LOCATION: (28)
94 <223> OTHER INFORMATION: 2'3' cyclic phosphate.
96 <220> FEATURE:
97 <223> OTHER INFORMATION: Description of Artificial Sequence: cleavage
98 produce
100 <400> SEQUENCE: 5
W--> 101 gggacgaatt ctaatacgac tcactatn 28
104 <210> SEQ ID NO: 6
105 <211> LENGTH: 28
106 <212> TYPE: DNA
107 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule: The n
111 at position 28 is adenosine ribonucleotide.
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
116 <400> SEQUENCE: 6
W--> 117 gggacgaatt ctaatacgac tcactatn 28
120 <210> SEQ ID NO: 7
121 <211> LENGTH: 19
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule: The n
127 at position 8 is adenosine ribonucleotide.
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Description of Artificial Sequence: substrate
132 <400> SEQUENCE: 7
W--> 133 tcactatngg aagagatgg 19
136 <210> SEQ ID NO: 8
137 <211> LENGTH: 8
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:

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142 <221> NAME/KEY: misc_feature
143 <222> LOCATION: (8)
144 <223> OTHER INFORMATION: The n at position 8 is adenosine nucleotide.
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Description of Artificial Sequence: template
149 <400> SEQUENCE: 8
W--> 150 tcactatn 8
153 <210> SEQ ID NO: 9
154 <211> LENGTH: 30
155 <212> TYPE: DNA
156 <213> ORGANISM: Artificial Sequence
158 <220> FEATURE:
159 <223> OTHER INFORMATION: Description of Artificial Sequence: template
161 <400> SEQUENCE: 9
162 ccatctcttc ctatagtgag tccggctgca 30
165 <210> SEQ ID NO: 10
166 <211> LENGTH: 15
167 <212> TYPE: DNA
168 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
173 <400> SEQUENCE: 10
174 gtgccaaagct taccg 15
177 <210> SEQ ID NO: 11
178 <211> LENGTH: 43
179 <212> TYPE: DNA
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
185 <400> SEQUENCE: 11
186 ctgcagaatt ctaatacgac tcactatagg aagagatggc gac 43
189 <210> SEQ ID NO: 12
190 <211> LENGTH: 19
191 <212> TYPE: DNA
192 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule: The n
196 at position 8 is adenosine ribonucleotide.
198 <220> FEATURE:
199 <223> OTHER INFORMATION: Description of Artificial Sequence: substrate
201 <400> SEQUENCE: 12
W--> 202 tcactatngg aagagatgg 19
205 <210> SEQ ID NO: 13
206 <211> LENGTH: 43
207 <212> TYPE: DNA
208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule: The n
212 at position 28 is adenosine ribonucleotide.

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214 <220> FEATURE:
215 <223> OTHER INFORMATION: Description of Artificial Sequence: fixed
216     substrate
218 <400> SEQUENCE: 13
W--> 219 gggacgaatt ctaatagcgc tcactatngg aagagatggc gac           43
222 <210> SEQ ID NO: 14
223 <211> LENGTH: 50
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
229     domain
231 <400> SEQUENCE: 14
232 tcacacatct ctgaagtagc gccgccgtat gtgacgctag gggttgcct           50
235 <210> SEQ ID NO: 15
236 <211> LENGTH: 50
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
242     domain
244 <400> SEQUENCE: 15
245 ggggggaacg ccgtaacaag ctctgaacta gcggttgcca tatagtcgta           50
248 <210> SEQ ID NO: 16
249 <211> LENGTH: 50
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
255     domain
257 <400> SEQUENCE: 16
258 cgggactccg tagccattg ctttttgcag cgtcaacgaa tagcgtatta           50
261 <210> SEQ ID NO: 17
262 <211> LENGTH: 50
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
268     domain
270 <400> SEQUENCE: 17
271 ccaccatgtc ttctcgagcc gaaccgatag ttacgtcata cctcccgtat           50
274 <210> SEQ ID NO: 18
275 <211> LENGTH: 50
276 <212> TYPE: DNA
277 <213> ORGANISM: Artificial Sequence
279 <220> FEATURE:
280 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
281     domain
283 <400> SEQUENCE: 18

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284 gccagattgc tgctaccagc ggtacgaaat agtgaagtgt tcgtgactat      50
287 <210> SEQ ID NO: 19
288 <211> LENGTH: 50
289 <212> TYPE: DNA
290 <213> ORGANISM: Artificial Sequence
292 <220> FEATURE:
293 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
294     domain
296 <400> SEQUENCE: 19
297 ataggccatg ctttggctag cggcaccgta tagtgtacct gcccttatcg      50
300 <210> SEQ ID NO: 20
301 <211> LENGTH: 50
302 <212> TYPE: DNA
303 <213> ORGANISM: Artificial Sequence
305 <220> FEATURE:
306 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
307     domain
309 <400> SEQUENCE: 20
310 tctgctctcc tctattctag cagtgcagcg aaatatgtcg aatagtcggt      50
313 <210> SEQ ID NO: 21
314 <211> LENGTH: 50
315 <212> TYPE: DNA
316 <213> ORGANISM: Artificial Sequence
318 <220> FEATURE:
319 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
320     domain
322 <400> SEQUENCE: 21
323 ttgcccagca tagtcggcag acgtggtgtt agcgacacga taggcccggg      50
326 <210> SEQ ID NO: 22
327 <211> LENGTH: 50
328 <212> TYPE: DNA
329 <213> ORGANISM: Artificial Sequence
331 <220> FEATURE:
332 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA enzyme
333     domain
335 <400> SEQUENCE: 22
336 ttgctagctc ggctgaactt ctgtagcgca accgaaatag tgaggcttga      50
339 <210> SEQ ID NO: 23
340 <211> LENGTH: 107
341 <212> TYPE: DNA
342 <213> ORGANISM: Artificial Sequence
344 <220> FEATURE:
345 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule: The n
346     at position 28 is adenosine ribonucleotide.
348 <220> FEATURE:
349 <223> OTHER INFORMATION: Description of Artificial Sequence: oligomer
351 <220> FEATURE:
352 <221> NAME/KEY: misc_feature
353 <222> LOCATION: (49)..(88)
  
```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/423,035A

DATE: 05/15/2001

TIME: 09:39:16

Input Set : A:\Scr21901.app

Output Set: N:\CRF3\05152001\I423035A.raw

L:49 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:2
L:49 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:2
L:49 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:117 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
L:117 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
L:117 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:133 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:133 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:202 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:12
L:202 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:12
L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:219 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:13
L:219 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:13
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:698 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50
L:699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50
L:721 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:1566 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:123